

1 1. In a balloon expandable stent, wherein said stent has a plurality of intercon-
2 nected members, and wherein said interconnected members form flexion points where two or
3 more of said members interconnect, whereby each of said members has a cross-sectional
4 width and a thickness and said members flex relative to each other as said stent expands, the
5 improvement comprising:

6 an array of relief cuts formed in some of said interconnected members at or near
7 said flexion points, said relief cuts extending completely through said members, whereby said
8 members flex more easily as said stent expands than without said relief cuts, and wherein said
9 interconnected members of said stent have cross sections wherein the width is between 1.5
10 and 5 times as great as said thickness.

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12 2. In a balloon expandable stent having a plurality of cells and said stent is
13 movable between a retracted and an expanded position, wherein said cells are formed by a
14 plurality of flexible, interconnected members, wherein said members have a thickness and a
15 cross-sectional width and form flexion points where two or more of said members interconnect,
16 said members flexing relative to each other as said stent expands, the improvement
17 comprising:

18 an array of relief cuts formed in some of said members at or near said flexion
19 points, said relief cuts extending completely through said members to cause said members
20 to flex more easily than without said relief cuts being formed therein and wherein said
21 interconnected members have cross sections wherein the width is between 1.5 and 5 times
22 as great as the thickness.

1 3. In a balloon expandable stent, wherein said stent has a plurality of intercon-
2 nected members, and wherein said interconnected members form flexion points where two or
3 more of said members interconnect, whereby each of said members has a cross-sectional
4 width and a thickness and said members flex relative to each other as said stent expands, the
5 improvement comprising:

6 an array of relief cuts formed in some of said interconnected members at or near
7 said flexion points, said relief cuts extending completely through said members, whereby said
8 members flex more easily as said stent expands than without said relief cuts, and wherein said
9 stent has distal and proximal ends and a central section, and wherein said relief cuts are
10 formed only in said distal and proximal ends.

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